

Fifteen Year Projected Incremental Road Maintenance Costs for 60 Acre Annex.

Prepared by Andy Clapper RMC Chair on July 21, 2019

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Budget																
Operating Expenses																	
Engineering Services	\$ 8,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Asphalt Patching	\$ 13,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 338	\$ 338	\$ 338	\$ 338	\$ 338	\$ 338	\$ 675	\$ 675	\$ 675	\$ 675
Tree Removal, Canopy, Encroachment	\$ 25,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,295	\$ 1,295	\$ 1,295	\$ 1,295	\$ 1,295
Shoulder Repairs	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 500	\$ 500	\$ 500	\$ 500
Mowing	\$ 25,000	\$ -	\$ 750	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500
Leaf Removal	\$ 20,000	\$ -	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Striping	\$ 18,000	\$ -	\$ -	\$ -	\$ -	\$ 900	\$ -	\$ -	\$ 900	\$ -	\$ -	\$ 900	\$ -	\$ -	\$ 900	\$ -	\$ -
Signage	\$ 2,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125
Storm Expense	\$ 40,000	\$ -	\$ -	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Total Operating Expenses	\$ 162,900	\$ -	\$ 1,750	\$ 4,500	\$ 4,500	\$ 5,400	\$ 4,500	\$ 5,213	\$ 6,113	\$ 5,213	\$ 5,213	\$ 6,113	\$ 6,508	\$ 7,095	\$ 7,995	\$ 7,095	\$ 7,095
Road Reserve Funding		\$ -	\$ -	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750
Total Annual Estimated Cost for RMC Including Repaving Reserve \$		\$ -	\$ 1,750	\$ 11,250	\$ 11,250	\$ 12,150	\$ 11,250	\$ 11,963	\$ 12,863	\$ 11,963	\$ 11,963	\$ 12,863	\$ 13,258	\$ 13,845	\$ 14,745	\$ 13,845	\$ 13,845

Assumptions used for developing estimated RMC costs for 60 Acre Annexation:

- 1) Annexed area will have 1 mile of new roads
- 2) Current Kenmore roads are slightly over 20 miles in total
- 3) Result = slightly under 5% additional road surface are for RMC to maintain. Used 5% for estimating purposes.
- 4) New roads categorized as Medium Use to determine useful life before re-surfacing = 18 Years
Note = This useful life category reflects light residential traffic but more than normal construction traffic
- 5) KEI would build roads in 2020 and transfer to RMC in mid-2021, first home occupied in 2022
Note = similar to Manorwood timing.
- 6) Engineering support is not really a function of surface area so no increase is expected.
- 7) Since all surfaces and signage would be new several categories of annual maintenance spend would not be required for several years:

	Start Year
a) Asphalt Patching	2026 at 50% of other roads through 10 years, then 100%
b) Tree Removal & Canopy	2031 at 100%
c) Shoulder Repairs	2026 at 50% of other roads through 10 years, then 100%
d) Striping	2024 at 100% once every three years
e) Signage	2026 at 100% Note = 2019 budget was \$12500 but included \$10,000 for replacement of the main entry sign
- 8) Other expense categories would start as soon as the road is turned over to KPOA RMC and first home(s) are built:

a) Mowing	2022 at 100% Note = Assume mowing frequency will be aligned with Pinnacle Peak/Hollybrook due to more sunlight and faster growth.
b) Leaf Removal	2022 at 100%
c) Storm Expense (Plowing etc.)	2022 at 100%
- 9) Road reserve would start in 2022. Assume \$11.50/square yard for overlay so one mile of road = \$121K over 18 year life = \$6750/year
Note = This assumes repaving after 18 years however if we see the expected benefits of asphalt rejuvenation treatments every 5 years this would be significantly reduced. As such neither costs nor benefits of ongoing asphalt rejuvenation are reflected.
- 10) All figures are using 2019 rates. i.e. No inflation applied.